Application No. 10/648,361 Docket No.: 0933-0210P

## **AMENDMENTS TO THE CLAIMS**

1. (Withdrawn) A purified and isolated nucleic acid comprising a nucleotide sequence that encodes a polypeptide comprising the amino acid sequence shown in SEQ ID NO:2 of Figure 7.

- 2. (Withdrawn) A purified and isolated nucleic acid comprising a nucleotide sequence shown in SEQ ID NO:1 of Figure 7.
- 3. (Withdrawn) A purified and isolated nucleic acid comprising a recombinant nucleotide sequence comprising a nucleotide sequence shown in SEQ ID NO:1 of Figure 7 or a homolog or fragment thereof.
- 4. (Withdrawn) An expression construct comprising the nucleic acid according to claim 2 operatively linked to an expression control sequence, said expression construct capable of encoding a MANF2 polypeptide or variants thereof.
- 5. (Withdrawn) A host cell transformed or transfected with the expression construct of claim 4.
- 6. (Withdrawn) A host cell transformed or transfected with a polynucleotide wherein said polynucleotide includes a strand containing a human nucleotide sequence that hybridizes to a DNA comprising the non-coding strand complementary to SEQ ID NO:1 of Figure 7, under the following hybridization conditions:
  - (a) hybridization at 42 °C for 20 hours in a solution containing 50% formamide, 5 X SSPE, 5 X Denhardt's solution, 0.1% SDS and 0.1 mg/ml denatured salmon sperm DNA;

Docket No.: 0933-0210P

and

- (b) washing the filter twice for thirty minutes at room temperature and twice for thirty minutes at 65 °C with a wash solution containing 1xSSC, and 0.1% SDS.
- 7. (Currently Amended) An isolated and purified MANF2 polypeptide comprising amino acids 27-187 of the amino acid sequence of SEQ ID NO:2 of Figure 7.
- 8. (Currently Amended) A Method method of producing a MANF2 polypeptide according to claim 7, said method comprising the steps of:

culturing a host cell of claim 5 comprising a polynucleotide encoding said polypeptide operably associated with a promoter sequence such that the nucleic acid sequence encoding said polypeptide is expressed; and

isolating said polypeptide from said host cell or from a growth medium in which said host cell is cultured.

- 9. (Withdrawn) Method of producing antibodies comprising:
- immunising a mammal with the isolated and purified MANF2 protein of claim 7 or an antigenic fragment thereof.

## 10. - 26. (Cancelled)

- 27. **(New)** The isolated and purified MANF2 polypeptide of claim 7, which comprises the entire sequence of SEQ ID NO:2.
- 28. (New) The isolated and purified MANF2 polypeptide of claim 7, which consists of amino acids 27-187 of the amino acid sequence of SEQ ID NO:2

29. (New) A method of producing a MANF2 polypeptide according to claim 27, said method comprising:

culturing a host cell comprising a polynucleotide encoding said polypeptide operably associated with a promoter sequence such that the nucleic acid sequence encoding said polypeptide is expressed; and

isolating said polypeptide from said host cell or from a growth medium in which said host cell is cultured.

30. (New) A method of producing a MANF2 polypeptide according to claim 28, said method comprising:

culturing a host cell comprising a polynucleotide encoding said polypeptide operably associated with a promoter sequence such that the nucleic acid sequence encoding said polypeptide is expressed; and

isolating said polypeptide from said host cell or from a growth medium in which said host cell is cultured.